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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(54) Title: METHOD AND APPARATUS FOR MANAGING MULTIPLE ON-LINE VENDORS THROUGH A REVERSE FRANCHISE

(57) Abstract

A system for managing (16) a plurality of on-line vendors is provided that permits the vendors to share a common fulfillment/distribution site. In one embodiment, products supplied by the fulfillment site, as well as the interface to the fulfillment site are generic, stripped of any identifying indicia. A session identifier, or similar means, is used to correlate a purchase transaction with the vendor that originated the purchase. Product shipment may also be devoid of any identifying indicia, or it may be customized to an individual vendor. In a preferred embodiment, the fulfillment site includes a management software program which tracks orders and revenue generated therewith. After subtracting a fee for operation of the on-line system, each vendor is awarded a profit allocation based upon a predetermined percentage of sales from the corresponding vendor.
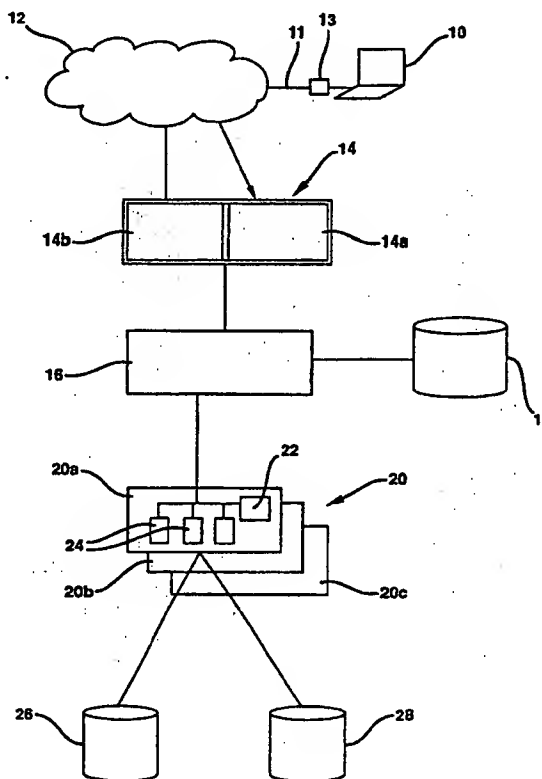
METHOD AND APPARATUS FOR MANAGING MULTIPLE ON-LINE VENDORS THROUGH A REVERSE FRANCHISE

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority to U.S. Provisional Patent Application Serial No. 60/131,431, filed on April 28, 1999 and entitled "Method and Apparatus for Managing On-Line Vendors."

BACKGROUND OF THE INVENTION

Field of the Invention

The method and apparatus of the present invention relate generally to electronic commerce and more particularly relates to the distribution of products using an electronic network.

Description of the Prior Art

The Internet is a global system of linked computer networks that allows numerous existing corporate and institutional networks to communicate using standard communications protocols or signals. That aspect of the Internet known as the World Wide Web (WWW) simplified these communications even more by providing what are known in the art as hypertext links, and by using Hypertext Transport Protocol (HTTP) to allow users to go from one hypertext link to another over the World Wide Web.

As appreciated by those skilled in the art, hypertext is a way of creating and publishing text that groups information into small units, called nodes or sites, that have what are called hypertext links or anchors embedded therein. When a reader of the text selects or "clicks" on a hyperlink, the hypertext software, often referred to as a web browser or simply a browser, displays the site associated with that link. The

E-commerce merchants have also strived to create brand name recognition. Unfortunately, the costs of establishing new national brand names, or simply to reposition existing brand names onto the Internet, are often prohibitive. The advertising efforts and expense frequently exceed the revenues generated, at least for the short term, until such brand name recognition is achieved. National brand names are designed to appeal to a wide segment of the population and, because their identity is inherently associated with a single product, necessarily forego the opportunity to identify products appealing to smaller cross-segments of the population.

Presently, a number of businesses successfully employ a multi-level marketing (MLM) concept for distributing products and/or services. Generally, the strategy behind using a MLM business model is to expand the distribution channels for a company's products and/or services by retaining a large number of small retailers as representatives. Among the well known companies using this business approach are AMWAY and AVON. However, although these companies distribute their products through a large number of individual representatives, the ultimate purchaser still associates the products offered for sale with the parent company, rather than with the individual representative. The products sold are not customizable by the individual representative, and the purchaser knows that he or she is purchasing products from the parent company. In essence, the representative does not have the opportunity to develop good will in its own name and products.

Relying on price and selection to attract customers who otherwise have no allegiance to the store, large on-line discount e-stores have effectively eradicated small on-line e-stores. Small e-stores are not able to incur the costs associated with establishing an on-line presence and the costs of receiving and processing orders. Moreover, small e-stores are often not able to stock the wide inventory of products necessary to effectively compete with the larger e-stores. Consequently, the good will and customer loyalty that many smaller stores have established are not capitalized on. Therefore, it would be advantageous to provide a product distribution system which

OBJECTS AND SUMMARY OF THE INVENTION

It is an object of the present invention to provide an electronic commerce system capable of managing multiple on-line vendors sharing a central product distribution/fulfillment site.

5   It is another object of the present invention to provide an on-line product distribution system which is able to control vendor product content and monitor electronic commerce transactions at each vendor site.

It is yet another object of the present invention to provide an on-line product distribution system which allows individual vendors to customize the interface to the 10   shared product distribution site by inserting indicia identifying a specific vendor.

It is a further object of the present invention to provide an on-line product distribution system which allows vendors to control which products its customers can access and purchase.

It is still another object of the present invention to provide an on-line product 15   distribution system which centralizes product fulfillment and distributes the cost of maintaining a large inventory of products or services among multiple vendors.

It is still a further object of the present invention to provide an on-line product distribution system which encourages users to go on-line who would not ordinarily do so.

20   The present invention revolutionizes electronic commerce by providing a method and apparatus that permits multiple vendors to create and manage an on-line business in a simple and cost-efficient manner. Rather than dominate the Internet, or

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By linking numerous on-line vendors with a central product distribution system, price discounts comparable to larger outlet stores can be obtained so that the products being offered for sale are price competitive. In addition, as most vendors will have a non-Internet presence, advertising and marketing efforts may be combined by each vendor. As the cost of operating the fulfillment system is effectively shared by multiple on-line vendors, the demand on any one vendor to meet minimum on-line sales requirements or objectives is substantially reduced, if not eliminated. As the success of the fulfillment system is not dependent upon any one vendor, vendors may create an on-line presence, even if their customer base is very minimal.

The present invention accomplishes these and other objectives by providing, in accordance with a preferred embodiment, a network server that contains multiple network addresses, or multiple network servers, each having their own network address, preferably an Internet Protocol (IP) address. Incoming requests or "hits" are identified with a session identifier (Id), IP address identifier, or by other suitable means known to those of ordinary skill in the art, and are routed to a management unit or processor. The processor sets up a purchase session in a distributed object architecture system or environment (e.g., COBRA, JAVA, JAVA BEAN or the like.) The distributed object architecture system links on-line vendor identification information with product information. Standard web page formats or customized web page formats may be used to display product information and input user data. Price and other data may be retrieved by the system directly from a common database which is preferably shared by multiple vendors. Moreover, prices or other information may be modified and stored for each vendor in a vendor database.

A management software program is preferably centrally provided to receive each order, thereby unifying the checkout process. In one embodiment, the checkout feature is uniform and devoid of any vendor names (i.e., generic). Session Id or similar means are used to tie the consumer purchase with the vendor that originated the sale. This facilitates vendor profit allocation and accounting. Product shipment

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1A is a schematic diagram of one embodiment of the shared on-line vendor management system formed in accordance with the present invention.

Figure 1B is a block diagram illustrating another embodiment of the shared
5   on-line vending system of the present invention.

Figure 2 is a block diagram of a preferred session identifying means that may be used to identify a user session with a network address that was accessed by the user.

Figure 3 is a block diagram of a preferred purchase management database used
10   to track sales and network origination data.

Figure 4 is a block diagram of a unified web page template that may be used by multiple vendors in accordance with a preferred embodiment of the present invention.

Figure 5 is a logical flow diagram of one embodiment of a shared on-line
15   vendor system formed in accordance with the present invention illustrating the general operation of the system.

Figure 6 is a logical flow diagram of one embodiment of a management unit for a shared on-line vendor system formed in accordance with the present invention.

Figure 7 is a logical flow diagram on one embodiment of a profit allocation
20   management method for a shared on-line vendor system formed in accordance with the present invention.

lines or wireless communication channels, including cellular, satellite, microwave, or electromotive force (EMF) networks.

The management unit or processor 16 of the present invention preferably receives a request from an incoming user 10 over the network 12 and creates a session identifier (Id). The session Id provides a means of correlating a particular request or transaction with a vendor's network address. As illustrated in Figure 2, the session Id 30 preferably includes an incoming network address portion 32 and a transaction identification (Id) portion 34. Referring again to Figure 1A, the session Id and related information are preferably stored by the management unit 16 into a database 18, operatively connected to the management unit 16. The database 18 may be implemented as a computer software program, such as Oracle or a suitable equivalent thereof known by those skilled in the art, and may ultimately be stored in hardware memory (e.g., random access memory) or other storage medium (e.g., computer disk).

The database 18 preferably allows the management unit 16 to track and store user information, such as purchase type/description and quantity, which may be compiled later by the fulfillment/distribution site. This information may subsequently be used by advertisers, market analysts, or other individuals in determining consumer purchasing preferences, prime motives (i.e., primary reason for visiting the vendor site), or the like. As illustrated in Figure 3, the management unit 16 preferably stores purchase information in a purchase database 40. The purchase database 40 may be organized into different sections, for example, a session Id section 42, a purchase section 44 and a section containing other information 46. Session Ids 30 are preferably stored in the session Id section 42 and correlated with purchase information 44 and optional additional information 46.

In a preferred embodiment, the management unit 16 includes a cryptographic processor (not shown). Any commercially available cryptographic processor may be used, such as a MC68HC16 microcontroller, manufactured by Motorola Inc., or an

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product description areas 56 and corresponding price information areas 58. It is to be appreciated that other identifying indicia may also be included in the logo area 52 to further customize the web page 50 according to each particular vendor.

Although the general layout of the web page 50 may be standard for each vendor, preferably each vendor can uniquely customize the web page, for example by inserting its own identifying logo or other identifying indicia, thus distinguishing one vendor site from another. Shared data, such as task bar data 54 and product descriptions 56, are preferably retrieved from a common database 26 (see Figure 1A) located at the fulfillment/distribution site. Similarly, customized information, such as logo data 52 (or other vendor identification indicia) and price data 58, if modified from a predetermined price set by the franchiser, are preferably retrieved from a vendor database 28 (see Figure 1A). The common database 26 and vendor database 28 are preferably operatively connected to the workstation 20. It should be appreciated that if multiple workstations 20a, 20b, 20c are employed, each workstation may be connected to its own vendor database. Alternatively, the vendor database 28 may be shared among workstations.

In order to prevent unauthorized access to the hosting database server or to the workstation 20, a firewall may be utilized (not shown). As appreciated by those skilled in the art, a firewall is a mechanism designed to limit access to certain critical or sensitive areas of the computer system, for example, the operating system. The firewall may be implemented as a computer software program or, alternatively, the firewall may be implemented in hardware to perform the same or similar gatekeeping task.

With reference to the logical flow diagram of Figure 5, a general method 60 of managing multiple on-line vendors, in accordance with one embodiment of the present invention, will now be described in detail. As illustrated in Figure 5, a user begins a purchasing session by entering a vendor site 62, preferably by selecting (i.e.,

the site. If a product filter 90 is available, product filtering information is preferably retrieved and applied 92. In a similar fashion, certain products or classes of products may be added by a particular vendor which may not be available to other vendors.

It is to be appreciated that, in accordance with the present invention, product information may be stored in a database with identifiers or tags that permit the product filters to operate. For example, a "kosher" tag, or other suitable identifier, may be applied to each product which permits all products to be easily sorted and identified. Any number of predetermined sorting tags may be used, such as brand name, ingredients, or any descriptive category.

As products are retrieved, the price information associated with those products must also be retrieved. Preferably, the retail price of a particular product is standard among all vendors. However, the present invention contemplates that a vendor may desire to control the selling price of a particular product. Accordingly, the present invention preferably provides a price modification mechanism 94 by which the vendor may adjust the price of any item (or items) as desired (either up or down), preferably within certain prescribed limits set by the fulfillment site. If price modifications are enabled, they are applied 96 to the selected product(s).

It is to be appreciated that vendors preferably may not be allowed to lower the price of a particular product below the transfer cost set by the fulfillment/distribution site. However, the present invention contemplates that certain allowances may be provided for vendors with large volumes of sales or who are otherwise deemed to have credit or be entitled to further discounts.

With continued reference to Figure 6, the product and price information is preferably input into the vendor web pages 98 so as to create the appearance of a vendor-specific Internet site. When the user selects a product 100, the product information and incoming network address identifier or session Id are preferably stored 102. The user may then continue to shop for additional products 104. This is similar in concept to a virtual shopping cart system utilized by conventional on-line

software, such as the Secure Webserver manufactured by Open Market, Inc. or a suitable equivalent thereof. A suitable interface for network access security may, for example, prompt the user for a personal identification number (PIN) or similar access code prior to transmitting the purchase order. This insures that customer credit

5   account and purchase information is kept strictly confidential, thereby reducing the likelihood of fraud or theft.

As illustrated in Figure 7, the management program 120 preferably periodically retrieves sales data 122 and product cost data 124. The sales data is

10   preferably sorted by session Id to identify the vendor that is to be credited with the corresponding product sale 126. Using this information, vendor profit allocation may be easily determined 128 and the vendor awarded with its predetermined share of the profits. The profit awarded to the vendor is preferably a fixed percentage of the gross sales attributable to the vendor, such as twenty percent (20%), or any other amount

15   agreed upon by the contracting parties. This profit allocation may be returned in the form of a cash or check rebate. Moreover, the rebate may be returned to the vendor electronically, by direct transfer into the vendor's bank account (i.e., direct deposit). Similarly, the present invention contemplates other non-monetary transactions as a means of awarding vendor profits, including inventory credits, stock transfers, or

20   401K account deposits.

In essence, the present invention allows an e-commerce business to be "franchised" over an electronic network, such as the Internet. In this scenario, vendors may be referred to as franchisees and the distribution site owners may be referred to as franchisers. Thus with the present invention, a franchiser running a

25   fulfillment/distribution site can offer vendors/franchisees a substantially complete unbranded e-commerce business comprised of front-end software (e.g., custom web pages), content and fulfillment services. Vendors/franchisees would then use their own brand names and individual network URL addresses to market their franchises.

For ease of understanding, traditional definitions of the terms "franchise,"

30   "franchiser" and "franchisee" have been employed herein. In effect, however, the

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Each franchisee is preferably assigned a unique network URL address. A user who accesses the URL address of the franchisee will see the franchisee's custom identifying templates and content as an overlay on the franchiser's front-end and product database. Orders placed to this site are fulfilled by the franchiser's fulfillment system. The packaging supplied by the franchiser is preferably generic (i.e., unbranded), although custom packaging and/or labeling identifying the franchisee as the source of the product may be supplied if requested by the franchisee. The present invention further contemplates that the franchisee may preferably be able to use "personalization" features of the franchiser's front-end software to more closely tailor the franchiser's site to the franchisee's specific market and customer base. This may include blocking certain classes of products or specific name brands offered for sale by the franchisee.

Since all transactions are preferably performed on the franchiser's system, the franchiser's control software is able to monitor sales information for each franchisee, both for general marketing purposes (e.g., to determine consumer buying preferences, etc.) as well as to support any commission structure. For privacy reasons, the type of information available to the franchiser may be restricted to include, for example, only customer names and amount of products purchased, rather the description of the products purchased. This information may be ultimately compiled by the franchiser and sold to third parties interested in consumer product preference or related research.

Those skilled in the art will appreciate that the present invention may be used to distribute any number of products or services. Whether books, pharmaceuticals, music, consumer electronics or the like are being sold, so long as at least a portion of the products or services supplied by two or more on-line vendors overlap, the present invention may be employed to sell and distribute these products. An example illustrating the applicability of the methods and apparatus of the present invention is described below in the context of an on-line drugstore business.

A shared on-line product distribution system formed in accordance with the present invention provides a means for managing multiple on-line vendors transacting

WHAT IS CLAIMED IS:

1.   A method of sharing an on-line fulfillment/distribution system comprising the steps of:

        providing a plurality of network addresses linked to the fulfillment/distribution system;

        receiving a request for a web page from a remote user;

        identifying the network address corresponding to the request; and

        inserting identifying indicia corresponding to the network address in the web page requested by the user.

2.   The method of Claim 1, further comprising the steps of:

        receiving a product order request from the user;

        distributing the requested product to the user; and

        correlating the distributed product with the network address in the web page requested by the user.

3.   A shared on-line fulfillment/distribution system comprising:

        a first network address;

        a second network address;

        at least one network server that receives requests directed to the first network address and the second network address; and

        a product management unit for displaying at least one web page containing product data, wherein when the first network address is detected a first identifying indicia is inserted into the web page and when the second network address is detected a second identifying indicia is inserted into the web page.

4.   A method of managing on-line vendors using an electronic network comprising the steps of:

        providing a plurality of remote order input sites operatively connected to the network;

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applying the price modification to the product if the price modification is in effect.

9.   The method of Claim 4, further comprising the steps of:

collecting product sales data from the vendor sites; and

determining product marketing information based on the product sales data.

10.   An apparatus for managing multiple on-line vendors, the apparatus comprising:

a plurality of vendor sites, each of the vendor sites receiving order requests from users of the vendor site and having a unique network address associated therewith, the users accessing each of the vendor sites through an electronic network by selecting the network address corresponding to the vendor site; and

a product fulfillment site operatively connected to the electronic network, the product fulfillment site receiving the order requests from the vendor sites and distributing products purchased by the users of the vendor sites.

11.   The apparatus of Claim 10, wherein the product fulfillment site comprises:

a management unit, the management unit creating a session identifier for each order request received from the user, the session identifier correlating the received order request with the network address of the vendor site through which the order request was received;

a database operatively connected to the management unit for storing session identifiers and related product information; and

a network server operatively connected to the electronic network, the network server providing an interface between the management unit and the network.

12.   The apparatus of Claim 11, wherein the management unit comprises:

a storage device; and

a processor operatively connected to the storage device, the storage device storing a program for controlling the processor and the processor being operative with the program for computing a total product sales corresponding to each of the vendor

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providing a product fulfillment site operatively connected to an electronic network, the fulfillment site hosting a plurality of vendor sites, each of the vendor sites having a unique network address associated therewith;

receiving an order request from a remote user connected to the network, the user accessing one of the vendor sites by selecting the network address associated with the vendor site;

creating a session identifier, the session identifier correlating the network address of the vendor with the order request;

displaying product and price information to the user, the product and price information including indicia uniquely identifying the vendor site to the user;

receiving payment and shipment information from the user; and

transmitting the order request, payment and shipment information to the fulfillment site for distributing the product to the user purchasing the product.

17.   A method of operating a franchised on-line fulfillment/distribution system, the fulfillment/distribution system being associated with a plurality of on-line addresses, comprising the steps of:

receiving a request for web page data, the request being addressed to one of the on-line addresses;

retrieving the requested web page data;

identifying the on-line address from the request;

retrieving vendor data indexed by the on-line address;

merging the web page data with the vendor data; and

providing the merged data in response to the request.

18.   A franchised on-line fulfillment/distribution system, comprising:

a server associated with a plurality of on-line addresses, each address being associated with a franchised vendor;

a product management unit in communication with the server;

a first database in communication with the product management unit, the first database storing vendor-independent information, the vendor-independent information containing fields; and
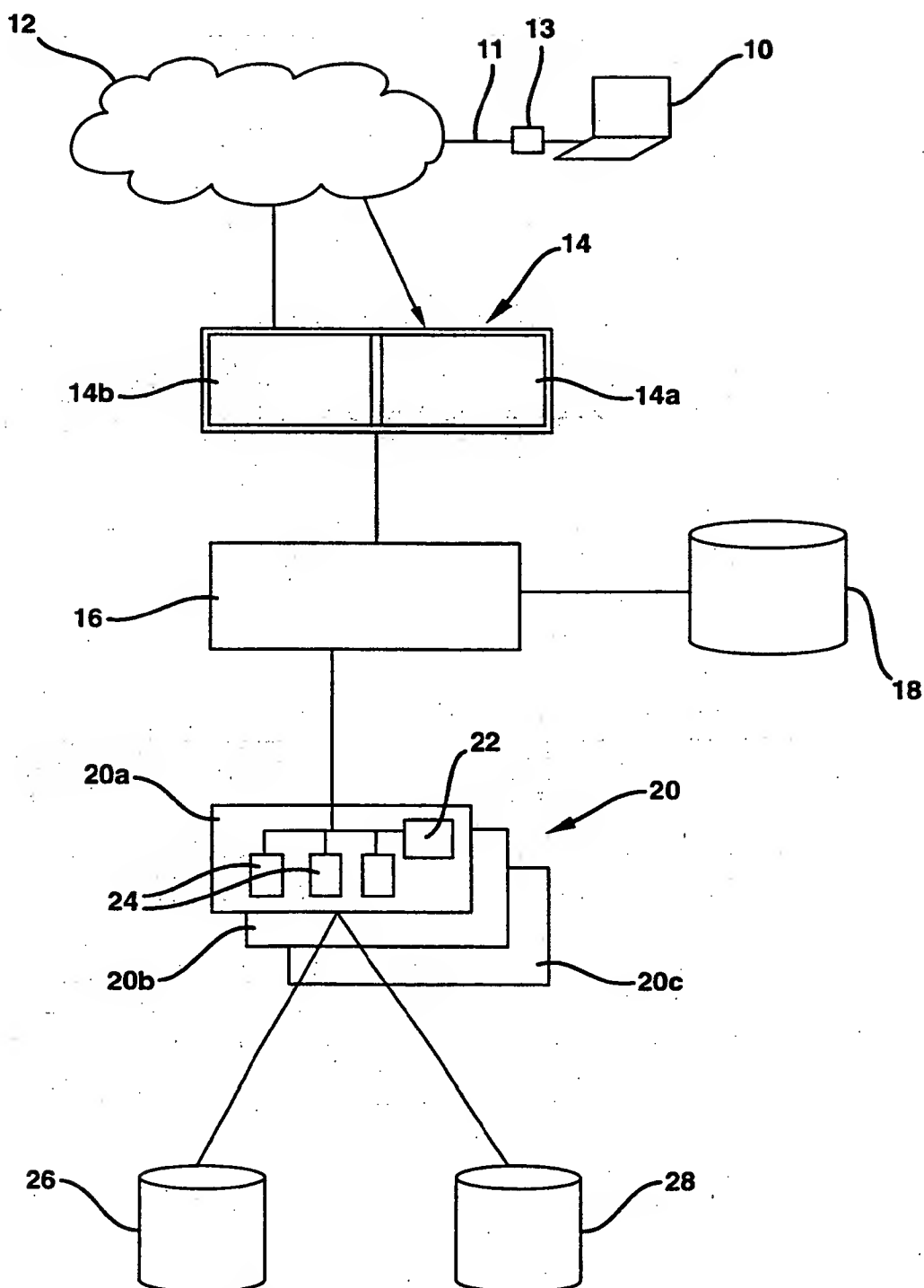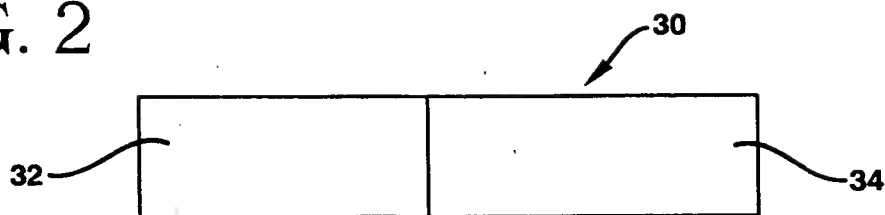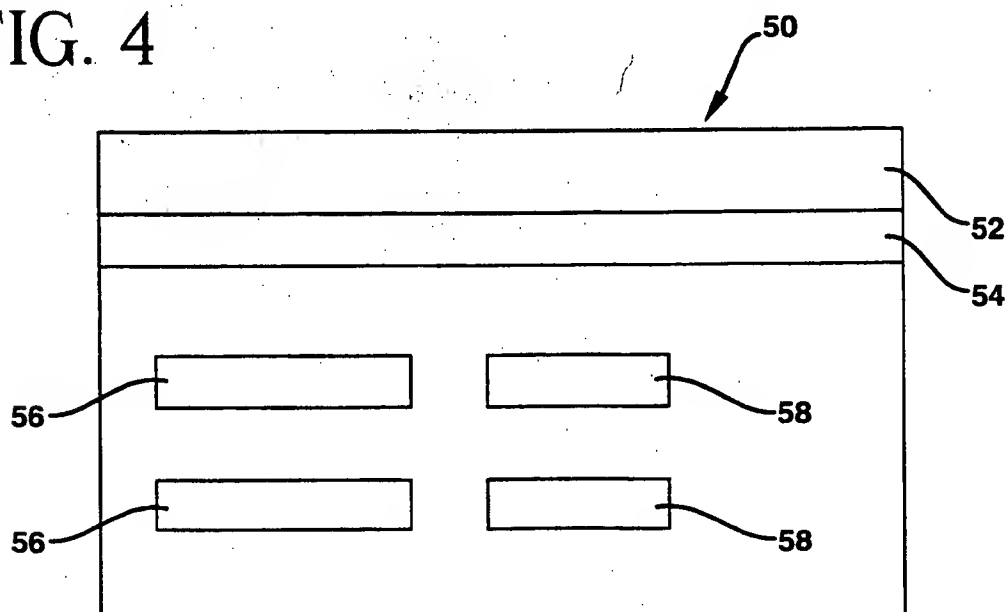
FIG. 1A

FIG. 2

FIG. 3

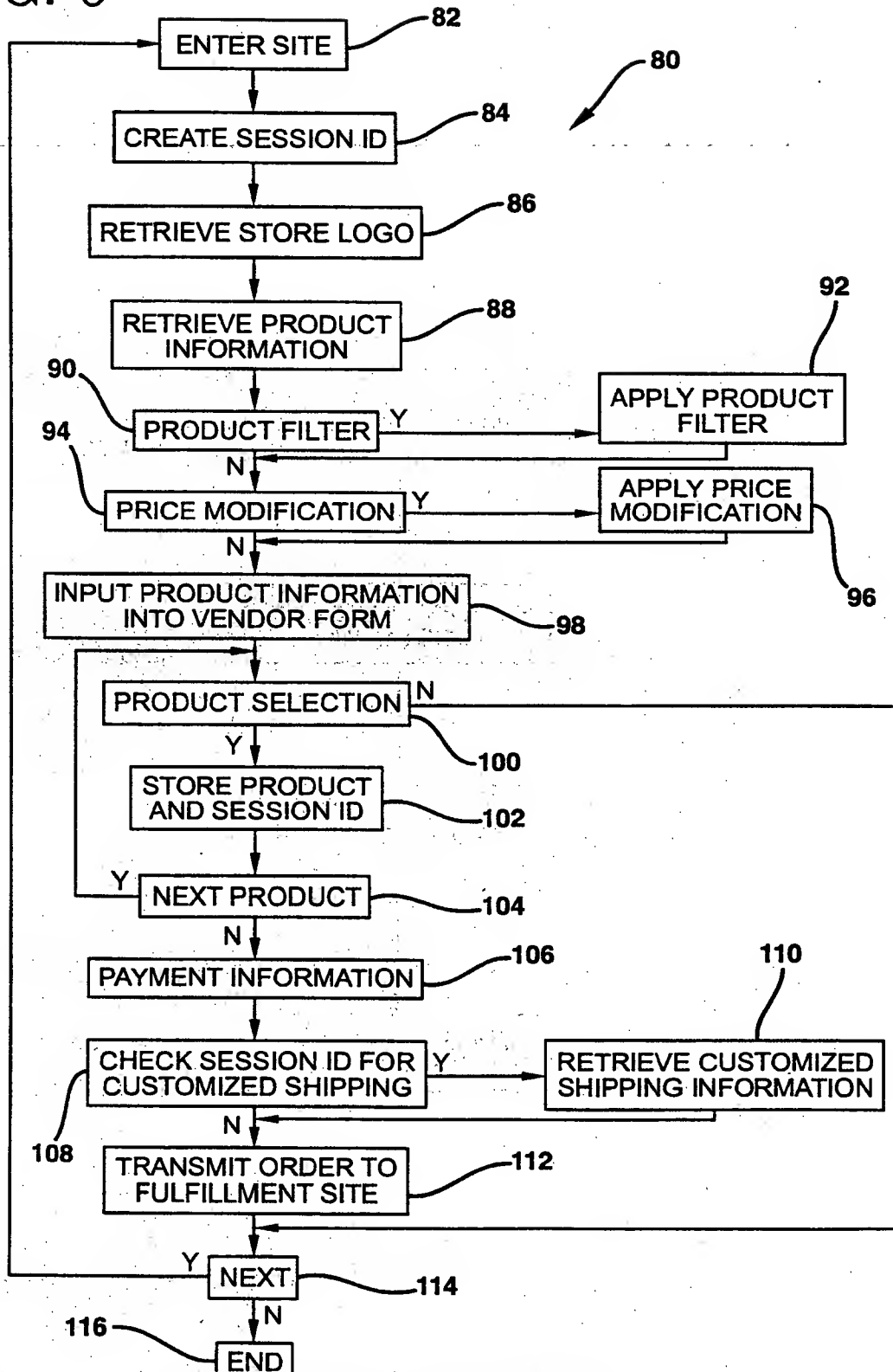| SESSION ID	PURCHASE	OTHER

FIG. 4

FIG. 6

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                    ENTER SITE ──────── 82
                         │
                         ▼                    80
              CREATE SESSION ID ──── 84
                         │
                         ▼
              RETRIEVE STORE LOGO ──── 86
                         │
                         ▼                              92
              RETRIEVE PRODUCT ──── 88
                  INFORMATION
       90                 │
                          ▼                    Y      APPLY PRODUCT
   94   │   PRODUCT FILTER ───────────────▶      FILTER
                          │ N
                          ▼
        │   PRICE MODIFICATION ───Y──────▶  APPLY PRICE
                          │ N                   MODIFICATION
                          ▼
        INPUT PRODUCT INFORMATION                      96
            INTO VENDOR FORM ──── 98
                          │
                          ▼
             PRODUCT SELECTION  │N
                          │ Y                    └── 100
                          ▼
              STORE PRODUCT
              AND SESSION ID ──── 102
                          │
              Y           ▼
        │   NEXT PRODUCT ──── 104
                          │ N
                          ▼
          PAYMENT INFORMATION ──── 106              110
                          │
                          ▼
         CHECK SESSION ID FOR │Y   RETRIEVE CUSTOMIZED
         CUSTOMIZED SHIPPING ──────▶  SHIPPING INFORMATION
                          │ N
        108               ▼
         TRANSMIT ORDER TO ──── 112
           FULFILLMENT SITE
                          │
              Y           ▼
        │         NEXT ──── 114
                          │ N
        116               ▼
                         END
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S U B S T I T U T E   S H E E T   (RULE 26)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/11052

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :G06F 17/60
US CL :705/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/26, 27, 28, 5, 8, 10, 21

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Please See Extra Sheet.

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Extra Sheet.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y,P	US 6,026,374 A (CHESS) 15 FEBRUARY 2000, claim 1, col.1 lines 6-7, col.2 lines 33-45, col.4 lines 42-47.	1-20
Y	US 5,769,269 A (PETERS) 23 JUNE 1998, col.1 lines 23-28, 62-64, col.2 lines 31-37, 43-45, 50-55, col.15 lines 8-14, claim 11.	1-20
Y,P	US 6,029,141 A (BEZOS ET AL.) 22 FEBRUARY 2000, the abstract, the summary, col.1 lines 20-23, col.2 lines 3-17, 29-37, col.3 lines 21-32, col.6 lines 15-20,41-58, 63-67, col.7 lines 35-40, 52-60, col.13 lines 1-8, col.14 lines 16-20, col.14 line 62 to col.15 line 4, and col.15 lines 25-33, 61-67, claim 2	1-20
Y,P	US 5,966,695 A (MELCHIONE ET AL.) 12 October 1999, col.29 lines 35-39, col.36 lines 45-50	1-20

[X] Further documents are listed in the continuation of Box C.   [ ]   See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance		
"E"	earlier document published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
27 JUNE 2000	**28 JUL 2000**
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer CUONG H. *(signature)* Telephone No. (703) 305-4553

Form PCT/ISA/210 (second sheet) (July 1998)*

B. FIELDS SEARCHED

Documentation other than minimum documentation that are included in the fields searched:

MICROSOFT PRESS, COMPUTER DICTIONARY 3RD EDITION
bARRON'S EDUCATIONAL SERIES, INC, DICTIONARY OF BANKING TERMS, EDITION 1997

B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

WEST2.0/DERWENT, DIALOG CLASSIC, NPL (CORPORATE RESOURCENET, PROQUEST DIRECT)
search terms: reverse, auction, vendor, chain, merge, order, filter, distribute, address, amazon.com, data, information, listing, product, display, network, site, shipment, receive, transmit, award, identifier, profit allocation, payment, retrieve